

**AMENDMENTS TO THE DRAWINGS:**

The is a attached replacement drawing sheet for Fig. 2.

## REMARKS

Favorable reconsideration in view of the previous amendments and following remarks is respectfully requested.

Claims 2-8, 15, 16, 18-35, and 40-42 are pending. By this Amendment claims 4, 5, 16, 18, 21-23, 31, 32 and 40 are amended and new claim 42 is added. No new matter has been added.

The Office Action objects to the Amendment filed July 7, 2008 alleging that it introduces new matter into the disclosure. In particular, the Office Action alleges that  $D_i$  is an external diameter. However, as recognized by the Examiner on page 4 of the Office Action, the internal diameter of the screw corresponds to the innermost shaft onto which the helical part of the screw is set. The internal diameter is internal to the external diameter  $D_a$ .

Fig. 2 now shows that  $A_z$  refers to the real surface wedge of the housing between the holes of two screws. See paragraph [0015] of Applicants' specification.  $A_m$  refers to a surface which defines a free space that is available to pass material through it. See paragraph [0006] of Applicants' specification. Thus, withdrawal of the objections to the July 7, 2009 Amendment is respectfully requested.

The Office Action rejects claims 40, 41, 2-8, 15, 16 and 18-35 under 35 U.S.C. §112 first paragraph.

The Office Action indicates there is no support for the screw shank, in particular one that is self cleaning. This assertion is traversed as a self-cleaning screw is clearly disclosed at paragraph [0006] of the as-filed specification and every screw has a screw shank.

The Office Action asserts that because claim 40 indicates that only the shanks are self cleaning the implication is that the other parts need not be self cleaning. Claim 40 is amended to recite "self cleaning screws." Furthermore, the process spaces have a lateral area  $A_m$  formed by smooth hole surfaces. As discussed in paragraph [0015] of Applicants' as-filed specification, the smooth wedge area and the smooth surface of the self cleaning screws insure complete self cleaning of the processing space. Claim 40 also recites the lateral area  $A_m$  has a smooth surface.

The Office Action indicates that there is no support for the limitation of each shank being arranged in a single bore hole. The claims are amended to recite that each screw is arranged in a respective hole.

The Office Action indicates that there is no support for the limitation "two flighted screw elements." Support for this feature can be found in German Applications 10144748.5 and 1024117.4 from which this application claims priority and whose contents have been incorporated by reference. See the term zweigängiges Schneckenelement and dreigängiges Schneckenelement disclosed throughout DE 101 44 748.

The Office Action indicates that there is no support in claim 5 for "twin screw elements." Claim 5 is amended to address this issue.

The Office Action indicates that there is not support for  $D_i$  being the inner diameter at the screw base. However, support for this is provided in paragraph [0006] of the specification which states that  $D_i$  is the internal diameter of the screw. This is clarified by Fig. 2 which together with paragraph [0006] satisfies the requirements of 35 U.S.C. § 112 first paragraph to enable any persons skilled in the art to make and use the invention.

The Office Action objects to claim 16 alleging that there is no support for the limitation that the shanks are tightly intermeshing. Support for the screws being tightly intermeshing is found in the previously mentioned German applications at paragraph [0024], and claim 16, dichtkämmende Ausführung der Schneckenelemente.

The Office Action asserts there is no support for arranging the shanks in a ring. Support for this feature can be found in Applicants' as-filed specification at paragraph [0027].

The Office Action rejects claims 40, 41, 2-8, 15, 16 and 18-35 under 35 U.S.C. §112 second paragraph. This rejection is respectfully traversed.

The Office Action indicates that there is no antecedent basis for the screws at line 9 in claim 40. Claim 40 is amended to address the Examiner's concerns.

The Office Action indicates that claim 40 is confusing because it is unclear what Az relates to as shown in Fig. 2. Fig. 2 is corrected to show that Az relates to the real surface wedge of the housing between the holes of two screws. Claim 40 is further amended to address the other issues discussed in the Office Action.

The Office Action rejects claim 5. Claim 5 is amended to recite "twin flighted screw elements."

The Office Action rejects claim 6 as reciting an improper Markush group, or in the alternative as being unclear. Applicants assert that claim 6 is clear as written and the product to be processed is a polycondensate that may be contaminated or moist, or contaminated and moist.

The Office Action rejects claim 18 for issues involving antecedent basis. Claim 18 is amended to address the Examiner's concerns.

The Office Action rejects claims 19 and 20 alleging that it is unclear what the control is separate from. Applicants respectfully assert that claims 19 and 20 are clear as written whereby user may separately change the temperature of the core and the housing, or otherwise the housing is formed of a plurality of segments each of whose temperature is controlled separately.

The Office Action rejects claim 22. Claim 22 is amended to address the Examiner's concerns.

The Office Action rejects claim 23. Claim 23 is amended to address the Examiner's concerns.

The Office Action rejects claim 16. Claim 16 is amended to address the Examiner's concerns.

The Office Action rejects claims 40, 1-8, 15, 16, 18-25, 35 and 41 under 35 U.S.C. §103(a) over U.S. Patent No. 5,951,940 to *Nosker et al.* in view of U.S. Patent No. 4,786,181 to *O'Brien* and U.S. Patent No. 3,998,438 to *Sokolow* alone or in view of Applicants' disclosed art; rejects claims 22-34 under 35 U.S.C. § 103(a) over U.S. Patent No. 5,895,809 to *Wagner et al.*, *O'Brien* and *Sokolow* and optionally in further view of Applicants' disclosed art. These rejections are respectfully traversed.

The Office Action alleges that the recitation of "portion" in claim 40 renders the claim broad. Claim 40 is amended to clarify that the process space formed by the lateral area  $A_m$  and the free volume  $V_f$  has a ratio  $A_m^3/V_f^2$  between 1020 and 3050. The relationship to the twin flighted screw elements merely connects the ratio of the lateral area to the free volume when a twin flighted screw element with the outer

diameter over the inner diameter being 1.3 to 1.7 is utilized. Such a feature is not disclosed in any of the applied references.

The dependent claims are allowable for at least the reasons discussed above as well as for the individual features they recite. For example, new dependent claim 42 recites wherein all of the screws are rotated in a common direction.

Early and favorable action with respect to this application is respectfully requested.


Should the Examiner have any questions regarding this amendment or the application in general, he is invited to contact the undersigned at the number provided below

Respectfully submitted,

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